



**MICHIGAN OFFICE OF
RETIREMENT SERVICES**
Big Plans. Small Steps.



Annual Supplemental Report

for The Michigan Public School Employees'
Retirement System, a Pension and Other Employee
Benefit Trust Fund of the State of Michigan
Fiscal Year Ended September 30, 2016

Prepared By
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About the Michigan Public School Employees' Retirement System

This report is in compliance with Public Act 300 of 1980, as amended. The contents came from the complete 2016 Comprehensive Annual Financial Report (CAFR), an existing public data source available on our website at www.michigan.gov/orsschools, and additional analysis performed after September 30, 2016. Additional data was sourced from the FY2016 Actuarial Valuation.

The Michigan Public School Employees Retirement System serves 211,007 retirees receiving monthly benefits, and 225,513 active members. Public school employees' pensions are protected by Michigan's Constitution. The System's net assets are held in trust to meet future benefit payments.

Assets and Liabilities

The present value of assets as of September 30, 2016 was \$47.5 billion for pension and Other Post-Employment Benefits (OPEB), and the total Actuarial Accrued Liability (AAL) was \$86.1 billion, resulting in a total Unfunded Actuarial Accrued Liability of \$38.6 billion.

System assets increased by approximately \$3 billion primarily due to positive investment experience as well as contributions from employers and employees. The Actuarial Accrued Liabilities for pension and OPEB increased by approximately \$5.5 billion primarily due to a change in the discount rate for non-pension plus plan from 8% to 7.5%.

FY 2016	Pension*	OPEB**	Total
Actuarial Accrued Liability***	\$ 72,310,445	\$ 13,776,390	\$ 86,086,835
Present Value of Assets	\$ 43,203,593	\$ 4,279,052	\$ 47,482,645
Unfunded Accrued Liability	\$ 29,106,852	\$ 9,497,337	\$ 38,604,189

*Source: 2016 MPSERS Pension Actuarial Valuation, page B-1

**Source: 2016 MPSERS OPEB Actuarial Valuation, page A-2

***Liabilities reflect change in discount rate from 8% to 7.5% for non-pension plus plan.

FY 2015	Pension*	OPEB**	Total
Actuarial Accrued Liability	\$ 67,727,577	\$ 12,832,405	\$ 80,559,982
Present Value of Assets	\$ 41,006,352	\$ 3,530,551	\$ 44,536,903
Unfunded Accrued Liability	\$ 26,721,224	\$ 9,301,854	\$ 36,023,078

*Source: 2015 MPSERS Pension Actuarial Valuation, page B-1

**Source: 2015 MPSERS OPEB Actuarial Valuation, page A-2

Revenue and Expenditures

The reserves needed to finance pension and other post-employment benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and net investment income for fiscal year 2016 totaled approximately \$7.3 billion.

The primary expenses of the System include the payment of pension benefits to members and beneficiaries, payment for health, dental and vision benefits, refund of contributions to former members, and the cost of administering the System.

Additions (in thousands)**	FY 2016	FY 2015
Member Contributions	\$ 781,150	\$ 777,353
Employer & Other Governmental Contributions	3,195,011	2,937,242
Net Investment Income (loss)	3,384,338	989,727
Transfers and Misc. Income	642	647
Total Additions	7,361,141	4,704,969

Deductions (in thousands)	FY 2016	FY 2015
Benefit Payments	\$ 4,671,315	\$ 4,530,916
Health, Dental, & Vision Benefits	653,071	700,903
Transfers & Refunds	27,090	136,998
Administrative Expenses	182,571*	177,899*
Total Deductions	\$ 5,534,047	\$ 5,546,716

Assets (in thousands)	FY 2016	FY 2015
Beginning of Year Assets	\$ 46,465,663	\$ 47,307,410
End of Year Net Assets	\$ 48,292,758	\$ 46,465,663

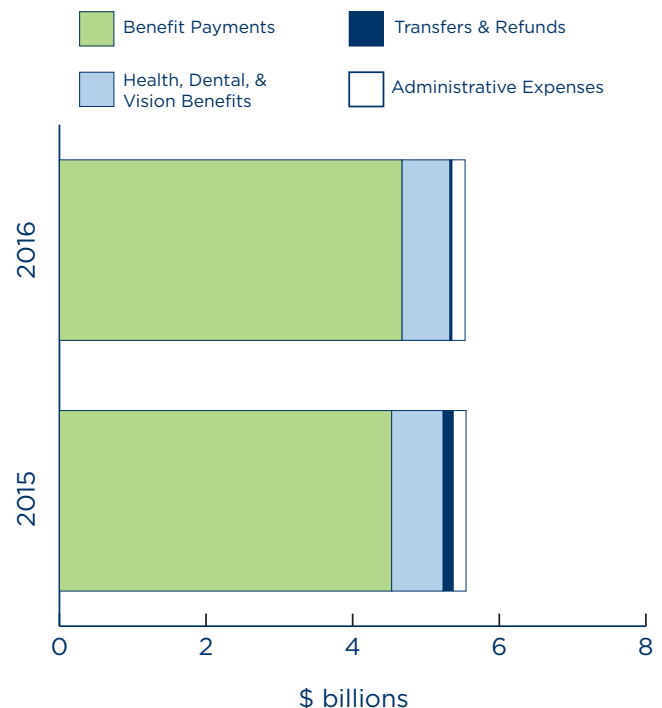
*Reflects participation in federal programs that provide a federal subsidy for eligible healthcare claims, producing a net overall savings to the system.

**Source: CAFR for the Fiscal Year ended September 30, 2016, p. 18.

Revenues



Expenditures



Investments & Earnings

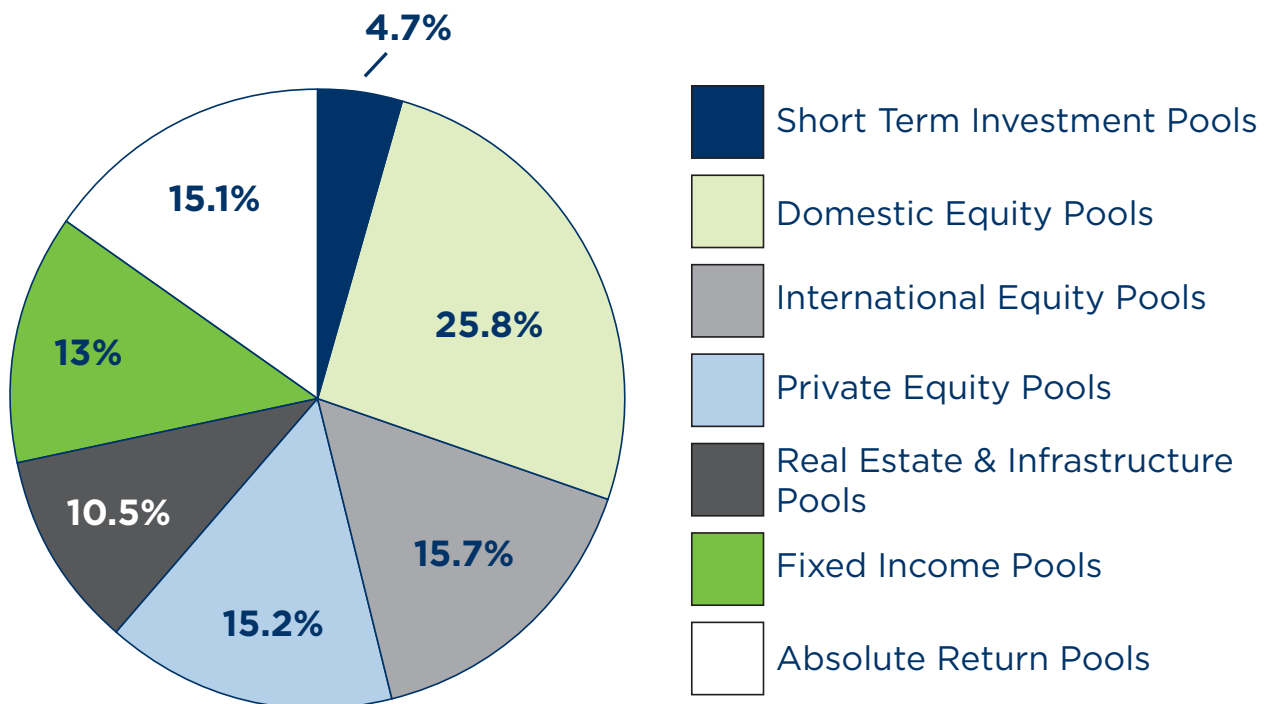
The State Treasurer administers all of the system's investments. The main objective is to maximize the return rate and meet the actuarial assumptions by being prudent with investments, and maintaining a diverse portfolio to eliminate unnecessary risk.

Why are there different types of assets in the retirement plan's portfolio? Having a diverse portfolio is like having shocks on a car. It minimizes the volatility, so the returns vary less from year to year. Even though market performance may fluctuate, the long-term performance of the retirement system's portfolio remains stable. This ensures our funds are financially sound.

Investments & Earnings*			
	Market Value		Total Investment and Interest Income
Fixed Income Pools	\$	6,258,404,299	\$ 415,646,087
Domestic Equity Pools		12,418,741,762	1,422,252,615
Real Estate & Infrastructure Pools		5,064,233,343	441,503,674
Private Equity Pool		7,296,798,061	348,270,915
International Equity Pools		7,563,276,044	655,407,616
Absolute Return Pools		7,233,372,040	174,573,480
Short Term Investment Pools		2,240,096,019	7,312,111
Market Value and Net Investment Gain	\$	48,074,921,568	\$ 3,464,966,498

*Source: CAFR for the Fiscal Year ended September 30, 2016, p. 77.

Investment Classes**

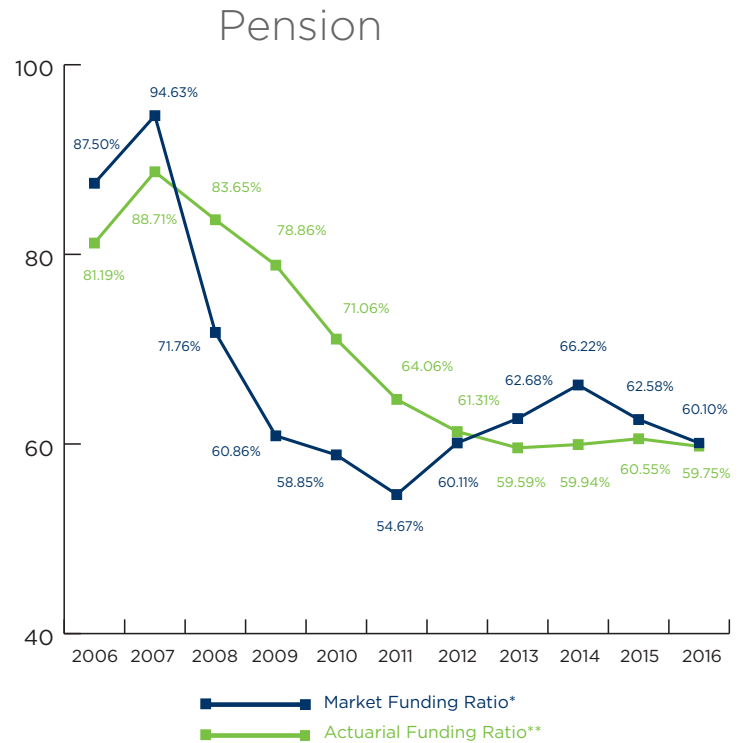


**Source: CAFR for the Fiscal Year ended September 30, 2016, p. 77.

Market Funded Ratios & Actuarial Funded Ratios

Pension

The market funding ratio is based only on the market value of assets at fiscal year end. The actuarial funding ratio incorporates a 5-year “smoothing” period that reduces volatility. The actuarial funding ratio is the common metric used by all pension plans nationwide. This smoothing process is used by almost every retirement system in the country; it helps avoid volatility in the pension systems’ funding requirements. As the economy improves, the funding ratio will also improve.



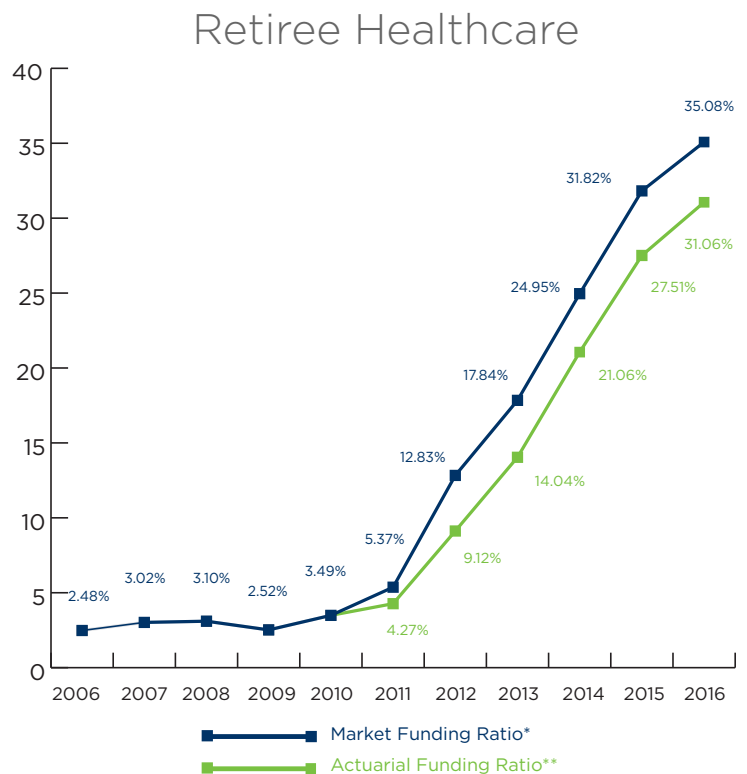
*Calculated on Market Value of Assets.

**Source: FY2016 Actuarial Valuation, p. B-1.

Healthcare

Starting in 2012, the Public School Employees’ Retirement System began pre-funding retiree health care costs, which significantly decreased the liability and increased the asset levels. Pre-funding is a best practice that invests assets and allows investment returns to help fund the plan.

Before 2012, the System was funded on a pay-as-you-go basis, so market and actuarial funded ratio were the same. Beginning in 2011, active member contributions required by Public Act 75 of 2010 were counted in the market value, but not the actuarial value. Over time, as pre-funding and member contributions ramp up, the funding ratio will improve significantly.

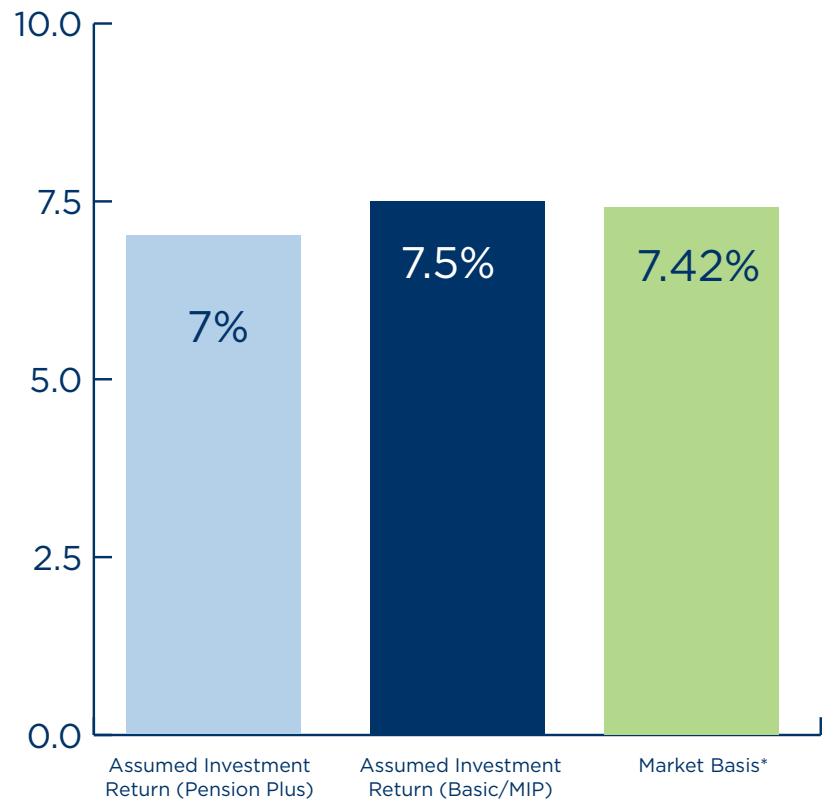


*Calculated on Market Value of Assets.

**Source: FY2016 Actuarial Valuation, p. A-2.

Discount Rates and Actual Investment Return

Contribution rates are determined by actuaries based on an assumed investment return each year. These assumptions are different for the Basic Plan/Member Investment Plan (MIP) and Pension Plus plan: 7.5 percent and 7 percent, respectively. When investments do not meet the assumed rate of return, as they did in 2016, this results in an actuarial loss for the Retirement System. The actual rate of investment return in FY 2016 was 7.42 percent, which is 0.08 lower than the assumed rate of return.

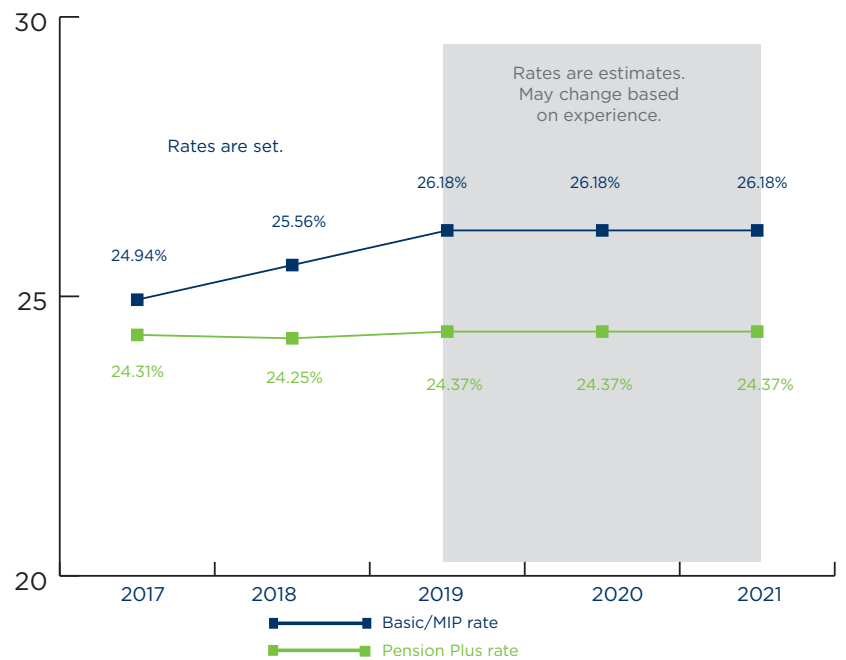


* Source: FY2016 Actuarial Valuation, p. C-3.

Contribution Rates

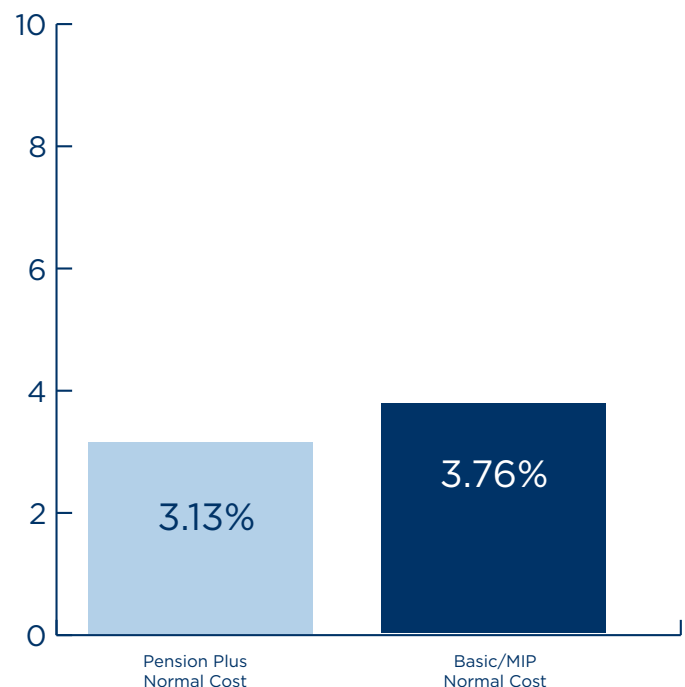
Contribution rates are determined actuarially based on the economic conditions and an assumed investment return each year. Contribution rates for fiscal years 2017 and 2018 have been calculated, provided to the employers, and published on the employer website.

Rates for fiscal years 2019, 2020, and 2021 are estimated using the most recent data available.



Employer Normal Cost Contribution Rates for FY 17

Normal Cost is the actual cost of the retirement benefit a member earns each year, and is set using the assumed rate of investment return shown above in addition to other actuarial assumptions. All Pension Plus members, all MIP members, and some Basic members contribute toward the cost of their retirement benefits. After member contributions are accounted for, the employer pays the remainder of the Normal Cost as shown here.



Office Closures

May 29, 2017 – Memorial Day
July 4, 2017 – Independence Day
September 4, 2017 – Labor Day

Our website is available seven days a week, even when our office is closed: www.michigan.gov/orsschools

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